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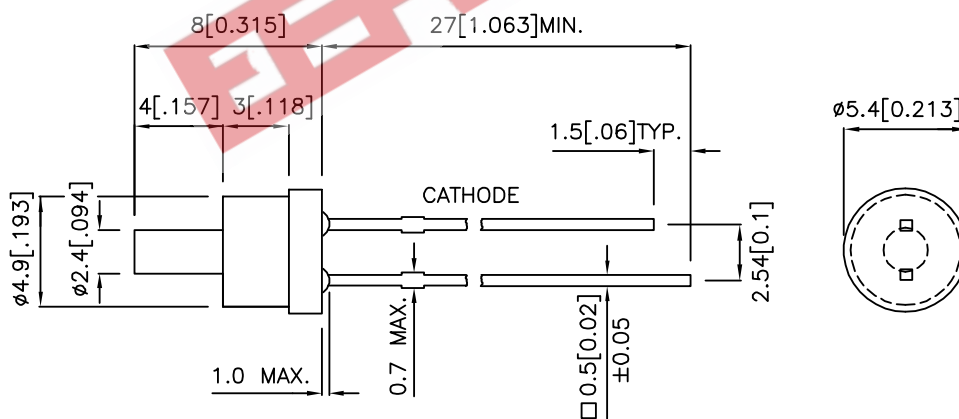WP443IDT   HIGH EFFICIENCY RED

Features

● LOW POWER CONSUMPTION.

● I.C.COMPTATIBLE.

● LONG LIFE - SOLID STATE RELIABILITY.

● FITS 2.4mm HOLE IN PANEL UP TO 4mm THICK.

● RoHS COMPLIANT.

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

Package Dimensions

Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

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Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 10mA | | Viewing Angle |
			Min.	Typ.	2 θ 1/2
WP443IDT	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	3	10	100°

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
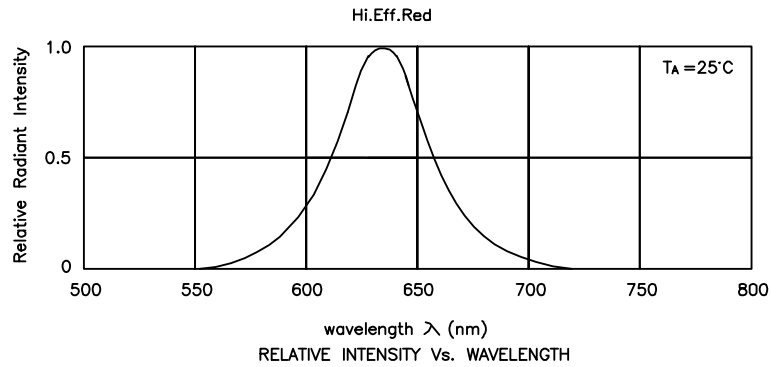
Electrical / Optical Characteristics at T$_A$=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	I$_F$=20mA
λD	Dominant Wavelength	High Efficiency Red	625		nm	I$_F$=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	I$_F$=20mA
C	Capacitance	High Efficiency Red	15		pF	V$_F$=0V;f=1MHz
V$_F$	Forward Voltage	High Efficiency Red	2.0	2.5	V	I$_F$=20mA
I$_R$	Reverse Current	High Efficiency Red		10	uA	V$_R$= 5V

Absolute Maximum Ratings at T$_A$=25°C

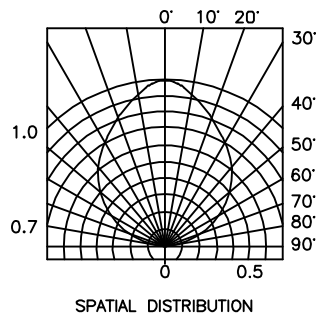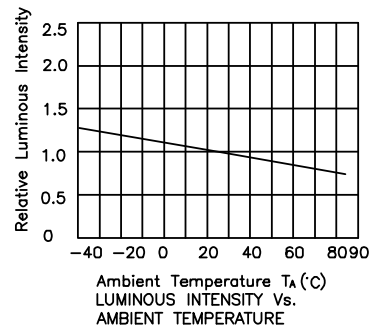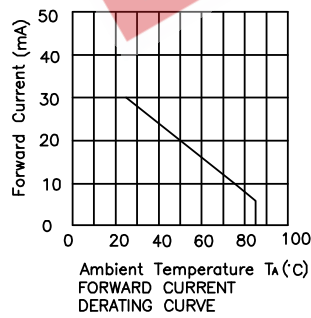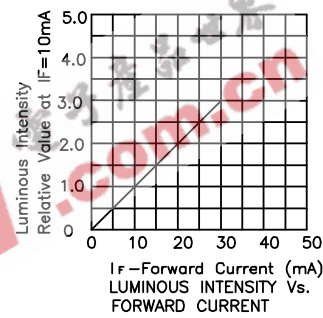| Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

Notes:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
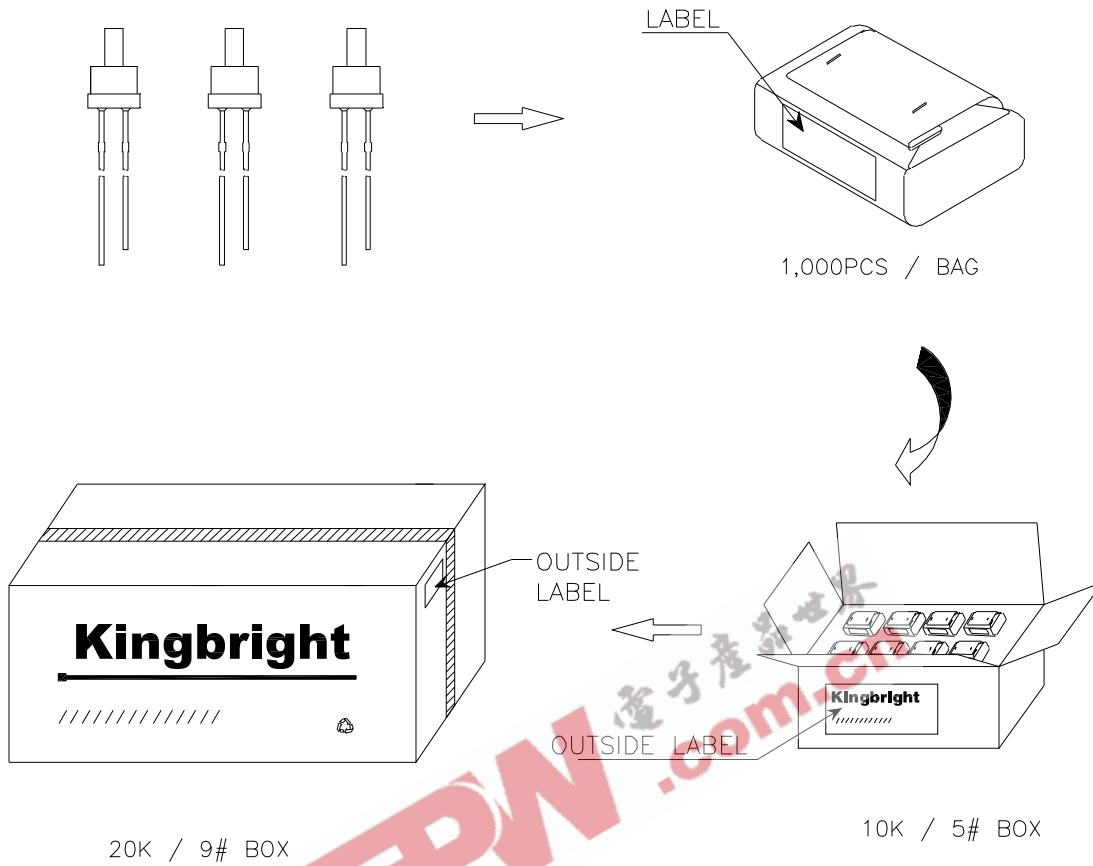2. 2mm below package base.
3. 5mm below package base.

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Hi.Eff.Red

RELATIVE INTENSITY Vs. WAVELENGTH

High Efficiency Red   **WP443IDT**

FORWARD CURRENT Vs.
FORWARD VOLTAGE

LUMINOUS INTENSITY Vs.
FORWARD CURRENT

FORWARD CURRENT
DERATING CURVE

LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

SPATIAL DISTRIBUTION
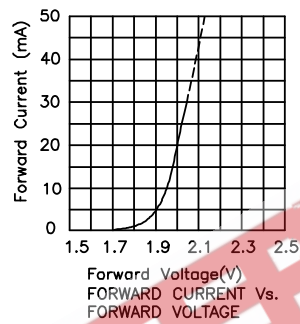
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PACKING & LABEL SPECIFICATIONS   WP443IDT

LABEL

1,000PCS / BAG

OUTSIDE LABEL

Kingbright

///////////////

OUTSIDE LABEL

20K / 9# BOX

10K / 5# BOX

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	Q.C.	QC XXX XX. 2005 PASSED

TYPE NO : WP443XXX

QUANTITY : 1,000 pcs

S/N : XXX   CODE: XX

LOT NO:

xxxxxxxxxxx

RoHS Compliant

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength),

the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm

2. Luminous Intensity: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.